



U.S. CONSUMER PRODUCT SAFETY COMMISSION
4330 EAST WEST HIGHWAY
BETHESDA, MD 20814

January 2, 2015

Mr. Joseph Harding
Technical Director
Portable Generator Manufacturers Association
1300 Sumner Ave.
Cleveland, OH 44115-2851

SUBJ: CPSC Staff Comments on BSR/PGMA G300-201x, *Safety and Performance of Portable Generators*

Dear Mr. Harding:

Thank you for providing U.S. Consumer Product Safety Commission (CPSC) staff an opportunity to participate in the canvass review of the Portable Generator Manufacturers Association's (PGMA) draft voluntary standard, BSR/PGMA G300-201x, *Safety and Performance of Portable Generators*. This letter represents staff's comments regarding this draft standard, for which PGMA is seeking recognition as an American National Standard.¹ As noted in your correspondence of November 7, 2014, CPSC is a nonvoting canvass member, and as such, provides these comments without a ballot.

First, staff notes with concern that the only requirement in the proposed standard pertaining to the carbon monoxide poisoning (CO) hazard is in section 7.2.2.1, which says: "Portable generators shall be marked to warn of the dangers of carbon monoxide poisoning according to Title 16 of the Code of Federal Regulations Part 1407." CPSC databases contain records of at least 858 deaths from CO poisoning caused by consumer use of a generator from 1999 through 2013, with an annual average of 69 deaths reported for the most complete 3-year period (2009–2011).^{2,3} Despite sustained information and education outreach efforts by the CPSC and many other stakeholders, including PGMA, to promote public awareness of the generator-related CO hazard, especially before and after major storms, deaths from the CO hazard continue to occur. Accordingly, staff believes that the warning label requirement, mandated by CPSC since 2007, is insufficient to address the CO hazard. Moreover, CPSC staff believes that it is of paramount importance to address this danger via more direct means. Therefore, CPSC staff has been advocating for manufacturers to reduce generator engine CO emission

¹ The views expressed in this letter are those of the CPSC staff, and they have not been reviewed or approved by, and may not necessarily reflect the views of, the Commission.

² Hnatov, Matthew, *Incidents, Deaths, and In-Depth Investigations Associated with Non-Fire Carbon Monoxide from Engine-Driven Generators and Other Engine-Driven Tools, 2004-2013*, U.S. Consumer Product Safety Commission, Bethesda, MD, June 2014. (Docket Identification CPSC-2006-0057-0023, available online at www.regulations.gov).

³ Hnatov, Matthew, *Incidents, Deaths, and In-Depth Investigations Associated with Non-Fire Carbon Monoxide from Engine-Driven Generators and Other Engine-Driven Tools, 1999-2012*, U.S. Consumer Product Safety Commission, Bethesda, MD, August 2013 (Docket Identification CPSC-2006-0057-0016, available online at www.regulations.gov).

rates because reducing emissions is a successful strategy used with other engine-driven products to reduce the risk of CO death and injury (and to protect against adverse environmental health effects of other engine exhaust constituents).⁴ Furthermore, CPSC has long identified the approach of reducing the source as the most effective in addressing any hazard. Accordingly, staff requests that PGMA include requirements related to limiting the generator engine's CO emission rate in the draft standard.

Power cords supplied with the generator are described in section 5.4.1: "If supplied with the portable generator, cords and associated fittings shall be suitable for the conditions of use." Staff recommends that the cord must be rated for outdoor use and that a minimum cord length be specified. The Centers for Disease Control and Prevention and CPSC recommend that generators be located at least 20 feet away from a home.^{5,6} Staff suggests a minimum cord length of 35 feet with the expectation that this will allow generators to be located at least 20 feet away from a home while still being able to provide power to appliances in the home.

The rain test described in section 6.2.11 differs in a number of ways from the rain test specified in Underwriters Laboratories (UL) Standard for Safety UL 2201, *Portable Engine-Generator Assemblies*.⁷ Staff's understanding is that the UL 2201 rain test is based on UL's requirements for all electrical products intended only for outdoor use and that these requirements have an established history for providing protection against the shock and electrocution hazards. To understand better the adequacy of PGMA's proposed rain test, staff requests that PGMA provide information on the background and appropriateness of their requirements.

Finally, on page ii, the opening paragraph states: "A Portable Generator Manufacturers' Association (PGMA) standard is intended as a guide to aid the manufacturer, the consumer, and the general public. The existence of a PGMA standard does not in any respect preclude anyone, whether he has approved the standard or not, from manufacturing, marketing, purchasing or using products, processes, or procedures not conforming to the standard." Staff is uncertain whether this means that portable generators marked as having been certified to BSR/PGMA G300-201x standard must comply with the standard's requirements. Therefore, staff requests clarification from PGMA.

Thank you for the opportunity to review and comment on PGMA's draft safety standard. I look forward to continuing to work with the PGMA on improving the safety of portable generators.

Sincerely,

Janet L. Buyer
Project Manager, Portable Generator Project

cc: Colin Church, CPSC Voluntary Standards Coordinator

⁴ Examples of reducing engine exhaust CO emission rates to reduce CO deaths and injuries include forklifts and other equipment used in enclosed areas, as well as the engines that power marine generators. Furthermore, when catalytic converters were put on automobile engines beginning in 1975 to meet EPA emission standards, this reduced unintentional vehicle-related CO deaths by greater than 80 percent in the years 1975 through 1996, compared to earlier years. (References: <http://www.epa.gov/oms/regs/nonroad/2002/f02037.pdf>, <http://www.epa.gov/otaq/standards/nonroad/smallsi-exhaust.htm>, <http://www.ncbi.nlm.nih.gov/pubmed/12190369>.)

⁵ <http://www.cdc.gov/features/copoisoning/>.

⁶ <http://www.cpsc.gov/onsafety/2014/01/winter-weather-alertgenerators/>.

⁷ UL Safety Standard for Portable Engine-Generator Assemblies, UL 2201, dated February 28, 2011.